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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/726,372	12/01/2000	Hans-Rudolf Nageli	ATM-2273	5299

7590                    08/30/2002

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EXAMINER	
TSOY, ELENA	
ART UNIT	PAPER NUMBER

1762

DATE MAILED: 08/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Offic Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/726,372	NAGELI ET AL.	
	<b>Examin r</b>	<b>Art Unit</b>	
	Elena Tsoy	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 01 December 2000.
- 2a) This action is FINAL.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-17 and 19-27 is/are pending in the application.
- 4a) Of the above claim(s) 13-17, 19 and 25-27 is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-13 and 20-25 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

#### Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some \* c) None of:
1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) <i>Not Found</i>          | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ . |
| 2) <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 . | 6) <input type="checkbox"/> Other: _____ .                                   |

***Response to Amendment***

1. Preliminary Amendment filed on December 1, 2000 has been entered. Claim 18 has been cancelled. Claims 19-27 have been added. Claims 1-17, 19-27 are pending in the application.

***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13, 25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 provides for the use of a coated aluminum foil of claim 12 comprising producing a package for moist animal feed, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 13 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

.. Claim 25 provides for the use of a coated aluminum foil of claim 12 comprising producing a package for moist animal feed, but, since the claim does not set forth any steps involved in the

method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claim 25 is rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

***Election/Restrictions***

4. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-12, and 20-24, drawn to a method of making a coated aluminum foil, classified in class 427, subclass 374.1.
  - II. Claims 14-17 and 26, drawn to a package comprising a coated aluminum foil, classified in class 428, subclass 35.7.
  - III. Claims 19 and 27, drawn to a process of packaging moist animal feed, classified in class 53, subclass 393.

The inventions are distinct, each from the other because of the following reasons:

5. Inventions I and II are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product,

which is a coated aluminum foil made by a process of Group I, is deemed to be useful not only for packaging but in construction or automotive industry and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

6. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case a coated aluminum foil made by a process of Group I is deemed to be useful not only for packaging but in construction or automotive industry.

7. Inventions II and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product (MPEP § 806.05(h)). In the instant case packaging comprising a coated aluminum foil is deemed to be useful not only for packaging moist animal feed but also for packaging photographic materials.

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8. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

9. During a telephone conversation with Ms. Kara Armstrong on May 23, 2002 a provisional election was made *without* traverse to prosecute the invention of group I, claims 1-13, 19-25, and 27. Claims 13, 19, 25, and 27 were further restricted out from group I and placed in group III during a telephone conversation with Mr. Virgil Marsh on June 19, 2002, therefore making group I to be claims 1-12 and claims 20-24. Claims 12 and 24 were further restricted to elect one of species: during a telephone conversation with Mr. Virgil Marsh on August 23, 2002, propylene modified with maleic anhydride (MAH) was elected for examination. Affirmation of these elections must be made by applicant in replying to this Office action. Claims 13-17, 19, and 25-27 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

10. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

*Specification*

11. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer

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is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

12. The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

### **Arrangement of the Specification**

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.)  
or  
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

13. The disclosure is objected to because of the following informalities: page 1, line 2,

"sterilisable" should be changed to – sterilizable --.

***Claim Objections***

14. Claims 1, 4, 12 are objected to because of the following informalities:

Claim1, line 2, "sterilisable" should be changed to -- sterilizable --.

Claim4, line 4, "To" should be changed to -- Tk --.

Claim12, line 6, "where Aa" should be changed to -- where AA --.

***Claim Rejections - 35 USC § 112***

15. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

16. Claims 9, 12, 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 9, line 3, a language of phrase "is passed through water where applicable ice-cooled" renders the claim indefinite because the phrase appears to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

For examining purposes the phrase was interpreted as -- is passed through ice-cooled water --.

Claims 12, 24 are generally narrative and indefinite, failing to conform to current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors. For examining purposes the claims were interpreted as -- The process of claim 11, wherein an adhesion-promotion agent (16) is co- or terpolymer of ethylene or propylene modified to promote adhesion with a monomer selected from the group

consisting of E.AA, ..., where AA is acrylic acid, ..., MAH is maleic anhydride and VA is vinyl acetate. --

*Claim Rejections - 35 USC § 103*

17. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

18. **Claims 1-6, 8, 9, 11, 12, 20, 21, 23, 24** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano et al (US 5,837,360) in view of Williams, Jr. et al (US 4,119,479) and Shaul et al (US 3,925,138).

Takano et al disclose a process for production of a steel sheet coated with a sealable and sterilisable plastic (B) based on polypropylene (PP) (See column 1, lines 9-17) such as random propylene-ethylene copolymer (See column 6, lines 53-55), wherein plastic is co-extruded with an adhesion promoting agent (A) and combined with the steel sheet forming a laminate (See column 5, lines 23-28), the steel sheet is desirably preheated to a temperature 140<sup>0</sup>C, which is above crystallite melt point (T<sub>K</sub>) of the plastic, so that the formed laminate has temperature about 140<sup>0</sup>C in order to retard crystallization of (A) and (B) layers (See column 5, lines 29-51); then quenching (cooling in a shock-like manner) the (A) and (B) layers such that the crystalline proportion at least in the surface area of the cooled PP layer (B) and the crystal grains in this area are as small as possible (See column 4, lines 40-43; column 5, lines 48-67).

Takano et al fail to teach that the formed laminate is heated using an oven; and the (A) and (B) layers are laminated to aluminum foil.

As to the formed laminate being heated using an oven, it is well known and conventional in the art to use oven for heating coated aluminum foil, as evidenced by Shaul et al (See column 4, lines 49-53). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used oven for heating a laminated (coated) aluminum foil of Takano et al since Shaul et al show that it is well known and conventional in the art to use oven for heating coated aluminum foil.

As to the (A) and (B) layers being laminated to aluminum foil, Williams, Jr. et al teach metal foil packaging materials comprising laminates with co-extruded PP and bonding layers (See column 2, lines 45-46, 54-55 column 4, lines 27-55) can be made using foils of any metal including steel, aluminum, etc. (See column 2, lines 18-25).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used aluminum foil instead of steel sheet in Takano et al since Williams, Jr. et al teach that either steel or aluminum foil can be used for making laminates with co-extruded PP and bonding layers.

As to claim 2, Takano et al teach that the metal sheet is desirably preheated to a temperature  $140^{\circ}\text{C}$ , which is at least  $20^{\circ}\text{C}$  above crystallite melt point ( $T_K$ ) of (A) (See column 5, lines 42-58). However, Takano et al do not expressly show that the crystallite melt point ( $T_K$ ) of the plastic (B) is not higher than  $120^{\circ}\text{C}$  so that the temperature of the heated laminate lies at least  $20^{\circ}\text{C}$  above the  $T_K$  of (B).

Takano et al teach that the crystallinity of (A) layer of no more than 55 % is obtained by initiating quenching of the heated laminate at a temperature higher than  $T_K$  of (A), i.e. before the crystallization of the (A) begins, in order to retard crystallization (See column 5, lines 45-58).

Since Takano et al teach that the crystallinity of (B) layer is also not more than 55 % (See column 2, lines 9-11; column 4, lines 23-31), it is clear that starting quenching temperature of  $120^{\circ}\text{C}$  should be higher than  $T_K$  of both (A) and (B) layers, i.e. before the crystallization of the both (A) and (B) layers begins. In other words, the crystallite melt point ( $T_K$ ) of the plastic (B) is not higher than  $120^{\circ}\text{C}$  so that the temperature of the heated laminate of at least of  $140^{\circ}\text{C}$  (See column 5, lines 36-43) lies at least  $20^{\circ}\text{C}$  above the  $T_K$  of (B).

**As to claims 3, 20,** Takano et al teach that the start temperature ( $T_S$ ) for the shock-like cooling of the (A) and (B) layers lies above the crystallite melt point ( $T_K$ ) of PP based layers and the end temperature ( $T_E$ ) of the shock-like cooling lies at least  $40^{\circ}\text{C}$  below the crystallite melt point ( $T_K$ ) (See column 5, lines 42-63).

**As to claim 4,** Takano et al teach that the end temperature ( $T_E$ ) of the shock-like cooling is at least  $60^{\circ}\text{C}$  (See column 5, lines 59-63).

**As to claims 5, 21,** Takano et al teach that the shock-like cooling speed is greater than  $10^{\circ}\text{C/sec}$  (See column 6, lines 10-12).

**As to claim 6,** Takano et al teach that the shock-like cooling speed ( $V_A$ ) is greater than  $50^{\circ}\text{C/sec}$ , preferably greater than  $100^{\circ}\text{C/sec}$  (See column 6, lines 10-12).

**As to claims 8, 23,** Takano et al teach that the shock-like cooling is carried out by direct cooling by means of a liquid or gaseous coolant (See column 6, lines 24-27).

**As to claims 9, 11,** Takano et al teach that the shock-like cooling can be carried out by any means provided that cooling conditions are satisfied (See column 6, lines 24-27). However, Takano et al fail to teach that the shock-like cooling can be carried out by ice-cooled water (Claim 9) or cooled air (Claim 11).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have carried out the shock-like cooling in a process of Takano et al by ice-cooled water or cooled air with the expectation of providing the desired cooling conditions since Takano et al teach that the shock-like cooling can be carried out by any means provided that cooling conditions are satisfied.

**As to claims 12, 24,** Takano et al teach that the adhesion promoting agent is PP modified with unsaturated acid or derivatives thereof such as AA, AE, MA, MAH (maleic anhydride). (See column 2, lines 1, 54-55, 61-67; column 3, lines 1-6).

19. **Claims 7, 10, 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Takano et al (US 5,837,360) in view of Williams, Jr. et al (US 4,119,479) and Shaul et al (US 3,925,138), as applied above, and further in view of Levendusky et al (US 5,919,517).

Combination of Takano et al, Williams, Jr. et al and Shaul et al teaches that the shock-like cooling can be carried out by any means provided that cooling conditions are satisfied (See Takano et al, column 6, lines 24-27). However, combination of Takano et al, Williams, Jr. et al and Shaul et al fails to teach that said means include water spray (Claim 10) or partial looping over at least one cooled roller (Claims 7, 22).

Levendusky et al teach that water spray or partial looping of a metal foil containing laminate over at least one cooled roller can be used for shock-like cooling of the laminate (See column 3, lines 29-60; column 12, lines 23-24; column 14, lines 34-53).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used water spray or partial looping over at least one cooled roller of a metal foil containing laminate in a process of combination of Takano et al, Williams, Jr. et al and Shaul et al

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with the expectation of providing the desired shock-like cooling of the laminate, since Levendusky et al teach use water spray or partial looping of a metal foil containing laminate over at least one cooled roller can be successfully used for shock-like cooling of the laminate.

### *Conclusion*

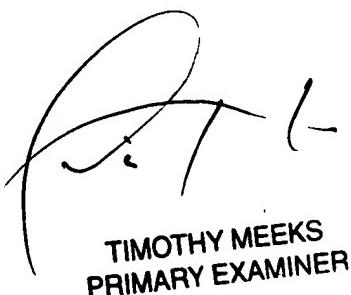
20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elena Tsoy whose telephone number is (703) 605-1171. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (703) 308-2333. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Elena Tsoy  
Examiner  
Art Unit 1762

August 23, 2002



TIMOTHY MEEKS  
PRIMARY EXAMINER